A Case of Hydatid Cyst in County Antrim

By H. C. DALES, M.Ch., F.R.C.S.(ENG.)
Smiley Hospital, Larne, Northern Ireland

HYDATID disease is due to the development in man, acting as an intermediate host, of the cystic larval form of a small tapeworm, *Echinococcus granulosus,* the normal habitat of which is the ileum of the dog. Ova from an infected dog are deposited with its fæces on the ground. By this means grass and vegetables are polluted with ova, and when eaten by sheep, cattle, goats or occasionally by man the ova gain access to the alimentary tract. The alkaline juices of the duodenum dissolve the outer coat and release the embryo. By means of its sharp hooklets, the embryo bores its way through the mucosa of the duodenum and enters the venous channels of the portal system. It is then carried to the liver, and if it passes through the liver, it is carried to the lungs via the right side of the heart. If it is not caught in either the liver or the lungs, it reaches the general circulation by means of the left side of the heart, and can then be carried to lodge anywhere in the body. When the embryo lodges in an organ it forms an hydatid cyst. The cyst consists of an outer layer, the ectocyst, which is formed from the tissues of the host, and an inner layer, the endocyst which produces both the hydatid fluid and the scolices. If a dog eats infected tissues of a sheep or cow each scolex which reaches the intestine of the dog can form an adult tapeworm.

The disease has a definite geographical distribution, and is common in Australia, the Middle East, Algeria, and Iceland. It is rare in the British Isles, and I have found only one reference in the literature to a case in Northern Ireland (Fraser, 1930). It is for that reason that the following case is reported.

> W. A. S., male, aged 61, was admitted to the Smiley Hospital, Larne, on 7th February, 1955. He gave a history of crampy abdominal pain, followed by pain in the R.I.F. for twenty-four hours. He had had a similar attack of pain twenty years ago. There was well-marked tenderness in the R.I.F. and a diagnosis of acute appendicitis was made. At operation a grossly inflamed appendix was removed, but a cyst three inches in diameter was found attached to the mesentry of the terminal ileum, and this was also removed. Dr. J. E. Morison reported that this was an echinococcus cyst. The lining of the cyst had in great part degenerated, but it was possible to make out brood capsules containing scolices, and to recognise clearly-defined hooks. A radiological search for further cysts revealed a large calcified mass in his pelvis, which is probably a dead cyst which has become impregnated with calcium. The Casoni test gave an immediate positive reaction.

The patient has been a farmer all his life, and has always kept a farm dog. While he keeps cattle he has never kept sheep. He has never been outside the British Isles, and his only visits outside Northern Ireland were for holidays to Ayrshire and Leicester one year ago, and to Liverpool ten years ago. While it is just possible that the cysts might be only ten years old, and that he could have been

infected on his visit to Liverpool, it is much more probable that they are much older than this, and that he was infected in Northern Ireland.

I wish to thank Dr. J. E. Morison of the Central Laboratory of the Northern Ireland Hospitals Authority for the pathological report, and Dr. V. D. Allison of the same laboratory for the fluid for the Casoni skin test.

REFERENCES.

DEW, H. R. (1948). *British Surgical Practice,* **5**, **46**. London: Butterworth.
FRASER, I. (1930). *Brit. J. Surg.*, **18**, 338.
JIDEJIAN, Y. (1933). *Surgery,* **34**, 155.

REVIEW

DIAGNOSIS AND TREATMENT OF THE ACUTE PHASE OF POLIOMYELITIS AND ITS COMPLICATIONS. Edited by Albert G. Bower, M.D. (Pp. 250; illustrations 64. 40s.) London: Ballière, Tindall & Cox, 1955.

THIS book is the product of the staff of the Communicable Disease Unit of the Los Angeles County Hospital, where over 18,000 cases of poliomyelitis have been diagnosed and treated during the past twenty-five years. Experience of such extent in poliomyelitis is blissfully unknown on this side of the Atlantic, and it is a great matter to have the knowledge of this team of workers compressed into a single volume.

The chapter on diagnosis and differential diagnosis is comprehensive and exceedingly good. The chapters on detection, care, and nursing procedures for respiratory paralysis are very good, and contain much valuable help.

The book is produced in first-class fashion, very well illustrated and presented in a style which is easy to absorb. It should be of great acceptance to physicians and hospital staff charged with the care of sufferers from poliomyelitis. F. F. K.